TITLE: SINGLE LINE DIAGRAM FOR THE PROPOSED ELECTRICAL WORKS AT PULIKESHINAGAR GLR PREMISES

DWG NO: TCE.13498A-EL-4001-AU-40001

INCOMER-1
415V SUPPLY FROM NEAREST
FROM 415V OVERHEAD LINE/BESCOM

11/0.433KV, 63 KVA
DISTRIBUTION TRANSFORMER
CENTRE (DTC)

DTC IS IN SCOPE OF CONTRACTOR
(EXCEPT LT METER)

LT METER IN BESCOM SCOPE

LT METER

PROVISION FOR CONNECTING INCOMER -2
(FUTURE)

3.5Cx50 SQ.MM,
AL. ARMD. CABLE

200A, 500V, 3-PH
4 POLE, MANUAL
CHANGE OVER SWITCH

3.5Cx50 SQ.MM,
AL. ARMD. CABLE

415V MAIN LV PANEL

LOC: PUMP HOUSE

WORKING LOAD=40.6 kW/48 kVA

PT
415V/√3 / 110V
CL 0.5, 20VA

6A MCB

6A MCB

R Y B

VSS V

CT
200/5A
CL 0.5
5VA

MFM ASS A

APFCR

200/5A
5P10
5VA

INCOMER
200A, MCCB, 4P

415V, 200A, 3Ph, TPN, 50Hz, 16kA/1 SEC, AL. BUSBAR

63A MCCB TP

3CX16 SQ.MM,
AL CABLE

15 kVAR
APFC PANEL

32A MCCB TPN

32A MCCB 4P

4Cx4 SQ.MM,
CU CABLE

125A MCCB TPN

SPARE

125/5A
CL. 0.5
5VA

ASS

STAR-DELTA
STARTER

R Y B

2RX3Cx35 SQ.MM, Al. ARMOURED,
XLPE CABLE

HSC PUMP MOTOR
55 HP/37 KW
(2 NOS.)

32A MCCB 4P

SPARE
(2 NOS.)

32A MCCB TPN

STREET LIGHTING DB

LOC: OUTDOOR
IP 55

4Cx4 SQ.MM,
CU. CABLE

32A TPN MCB

6A,SP MCB

R Y B

NL

C 30A

MANUAL AUTO TOGGLE SW

OFF

DAY TIMER 0-24Hrs.

OFF ON

415V, 30A, TPN. AL BUSBAR

10A TPN MCB

10A TPN MCB

10A TPN MCB

4Cx4 SQ.MM,
CU. CABLE
(TYPICAL)

CIRCUIT#1
4 NOs. 150W LED
STREET LIGHT

CIRCUIT#2
4 NOs. 150W LED
STREET LIGHT

CIRCUIT#3
SPARE

4Cx4 SQ.MM,
CU. CABLE

INDOOR LTG DB

LOC: ELECTRICAL ROOM
(WALL MOUNTED)
IP 42

INCOMER
R Y B

32A,4P
MCB+RCCB
(30 mA)

415V, 60A, TPN, AL, BUSBAR, 10kA/1SEC.

R1 R2 R3 R4 Y1 Y2-Y4 B1 B2-B4

10A SP MCB

10A TP MCB

SPARE

SPARE

3x2.5 SQ.MM,
CU. CABLE
(TYPICAL)

TO INDOOR LIGHTING CIRCUITS

4Cx4 SQ.MM,
CU. CABLE

POWER DB

LOC: ELECTRICAL ROOM
(WALL MOUNTED)
IP 54

LCS

32A,4P
MCB

INCOMER
R Y B

415V, 60A, TPN, AL, BUSBAR, 10kA/1SEC.

16A DP MCB

25A DP MCB

32A DP MCB

3x2.5 SQ.MM,
CU. CABLE
(TYPICAL)

TO EXHAUST FANS
(4 NOS.)

SPARE

TO PLC/INSTRUMENTATION

6A SW+10A SOCK
(EMERGENCY LIGHT
RECHARGEABLE TYPE)
(1 NOS.)

6A SW+10A SOCK
(EMERGENCY LIGHT
RECHARGEABLE TYPE)
(2 NOS.)

SPARE

SPARE

SPARE

20A PLUG SOCKET (INDUSTRIAL)
(2 NOs.)

20A PLUG SOCKET (INDUSTRIAL)
(2 NOs.)

	SIGN.											
	INITIALS											
	REVISIONS											
	SIGN.											
	INITIALS											
	REVISIONS											
PO	SIGN.											
	INITIALS	ND	GVK	GVK								02-02-2024
ISSUE		DRN	DSN	CHD	CV	EL	IC	ME	CLEARED		PE/PM	APPD	DATE

DO NOT SCALE

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BANGALORE WATER SUPPLY AND SEWERAGE BOARD

CONSTRUCTION OF 5ML CAPACITY TWO TIER GLR AT PULKESHINAGAR BANGALORE

SINGLE LINE DIAGRAM FOR THE PROPOSED ELECTRICAL WORKS AT PULIKESHINAGAR GLR PREMISES

TATA CONSULTING ENGINEERS LIMITED
MUMBAI

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